

AP20 Rec'd PCT/PTO 01 SEP 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Roberto Di Santo et al.

Application No.: To be assigned

Filed: Herewith

Confirmation No.: To be assigned

For: QUINOLIN-4-ONES AS INHIBITORS OF
RETROVIRAL INTEGRASE FOR THE
TREATMENT OF HIV, AIDS AND AIDS
RELATED COMPLEX (ARC)

Examiner: To be assigned

Art Unit: To be assigned

Attorney Reference No.: 4239-64846-04

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as Express Mail Label No. EV668294658US in an envelope addressed to: MAIL STOP PCT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney or Agent
for Applicant(s)

Myra H. Rupert

Date Mailed September 1, 2006

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INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)(2)

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language and/or non-English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

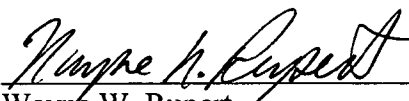
Applicants filed this Information Disclosure Statement ("IDS") within three months of the date of entry of the national stage as set forth in § 1.491 in an international application. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A **duplicate** copy of this IDS is enclosed.

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The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Attorney Docket Number	4239-64846-04
	Application Number	107591679
	Filing Date	Herewith
	First Named Inventor	Roberto DiSanto
	Art Unit	To be assigned
	Examiner Name	To be assigned

U.S. PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
		4,386,092	31 May 1983	Oe et al.
		5,217,972	08 June 1993	Grohe et al.
		5,519,016	21 May 1996	Kimura et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
		Europe	EP 0 8780194 A1 ✓	18 Nov 1998	Sankyo Company Limited
		WIPO/PCT	WO 99/50245 /	07 Oct 1999	Shionogi & Co., Ltd.
		WIPO/PCT	WO 99/62513 ✓	09 Dec 1999	Merck & Co., Inc., Tularik, Inc.
		WIPO/PCT	WO 99/62520	09 Dec 1999	Merck & Co., Inc., Tularik, Inc.
		WIPO/PCT	WO 99/62897 <	09 Dec 1999	Merck & Co., Inc.
		WIPO/PCT	WO 00/06529 /	10 Feb 2000	Instituto di Ricerche di Biologia Molecolare P Angeletti S.P.A.
		WIPO/PCT	WO 01/00578 A1 ✓	04 Jan 2001	Merck & Co., Inc., Tularik, Inc.
		WIPO/PCT	WO 01/98248 A2 ,	27 Dec 2001	Bristol-Myers Squibb Company

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
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EXAMINER SIGNATURE:	DATE CONSIDERED:
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* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Attorney Docket Number		4239-64846-04	
				Application Number		10/591679	
				Filing Date		Herewith	
				First Named Inventor		Roberto DiSanto	
				Art Unit		To be assigned	
				Examiner Name		To be assigned	
		WIPO/PCT	WO 03/049695 A2	19 June 2003	The Government of the United States of America as represented by the Secretary, Department of Health and Human Services		
		WIPO/PCT	WO 2004/046115 A1	03 June 2004	Japan Tobacco Inc.		
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS					
		Baba et al., "Potent and Selective Inhibition of Human Immunodeficiency Virus Type 1 Transcription by Piperazinyloxoquinoline Derivatives," <i>Antimicrobial Agents and Chemotherapy</i> 41(6):1250-1255, 1997					
		Baba et al., "Inhibition of Human Immunodeficiency Virus Type 1 Replication and Cytokine Production by Fluoroquinoline Derivatives," <i>Molecular Pharmacology</i> 53:1097-1103, 1998					
		De Clerq, "New developments in anti-HIV chemotherapy," <i>Pure Appl. Chem</i> 73(1):55-66, 2001					
		Espeseth et al., "HIV-1 integrase inhibitors that compete with the target DNA substrate define a unique strand transfer conformation for integrase," <i>PNAS</i> 97(21):11244-11249, 2000					
		Goldgur et al., "Structure of the HIV-1 integrase catalytic domain complexed with an inhibitor: A platform for antiviral drug design," <i>PNAS</i> 96(23):13040-13043, 1999					
		Grobler et al., "Diketo acid inhibitor mechanism and HIV-1 integrase: Implications for metal binding in the active site of phosphotransferase enzymes," <i>PNAS</i> 99(10):6661-6666, 2002					
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS					
		Hazuda et al., "Inhibitors of Strand Transfer that Prevent Integration and Inhibit HIV-1 Replication in Cells," <i>Science</i> 287:646-650, 2000					
		Marchand et al., "Structural Determinants for HIV-1 Integrase Inhibition by β -Diketo Acids," <i>The Journal of Biological Chemistry</i> 277(15):12596-12603, 2002					

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			Filing Date	Herewith
			First Named Inventor	Roberto DiSanto
			Art Unit	To be assigned
			Examiner Name	To be assigned
		Okamoto et al., "Inhibition of Human Immunodeficiency Virus Type 1 Replication by Combination of Transcription Inhibitor K-12 and Other Antiretroviral Agents in Acutely and Chronically Infected Cells," <i>Antimicrobial Agents and Chemotherapy</i> 43(3):492-497, 1999		
		Okamoto et al., "Inhibition of the RNA-Dependent Transactivation and Replication of Human Immunodeficiency Virus Type 1 by a Fluoroquinoline Derivative K-37," <i>Virology</i> 272:402-408, 2000		
		Pais et al., "Structure Activity of 3-Aryl-1,3-diketo-Containing Compounds as HIV-1 Integrase Inhibitors," <i>J. Med Chem.</i> 45:3184-3194, 2002		
		Wai et al., "4-Aryl-2,4-dioxobutanoic Acid Inhibitors of HIV-1 Integrase and Viral Replication in Cells," <i>Journal of Medical Chemistry</i> 43(26):4923-4926, 2000		
		Zhang et al., "Azido-Containing Aryl β -Diketo Acid HIV-1 Integrase Inhibitors," <i>Bioorganic & Medicinal Chemistry Letters</i> 13:1215-1219, 2003		

EXAMINER SIGNATURE: /D Margaret Seaman/	DATE CONSIDERED: 12/02/2009
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	